

Appl. No.: 10/581,989

Amdt. Dated June 15, 2010

Response to Office Action Mailed March 16, 2010

REMARKS:

Applicant appreciates the time and care the examiner has taken in examining the application.

All references to paragraph numbers in the specification of this application are to the paragraph numbers as set forth in the published version of this application, U.S. Pat. App. Pub. No. 2007-0217872.

On the Amendments. The examiner's objections have been addressed in the amendments to the specification and drawings presented in the preceding pages. Reference numeral 18 has been added to the articulated axle that was described and shown in the original specification at Para. [0006] and FIGS. 1-2. Reference numeral 19 has been added to the heading face that was described and shown in the original specification at Para. [0016] and FIG. 3. Para. [0014] has been amended to add another reference to the "sled" because original reference numeral 6 referring to a "slide track" also is intended to refer to the sled set forth in claim 5. The abstract has been amended to replace the objected-to term "means" with the term "device." No new matter is added; the amendments are all supported in the original specification at the figures and paragraphs referenced above, among other places.

On the Rejections.

It is respectfully submitted that no prima facie case of obviousness has been established with respect to the invention as set forth in independent claim 1 and claims 2-20 depending therefrom. Claim 1 provides for haulage of subsurface-mined material using at least two similar

vehicles, each of the similar vehicles comprising a travel drive, comprising the steps of moving the at least two similar vehicles in a roadway section between a heading face and a continuously extended haulage means, and conducting at least one material transfer from the first of the similar vehicles to a second one of the similar vehicles between the heading face, and a transfer of the material to the haulage means. The unique benefit of the method as claimed arises from the feature of having at least one material transfer from the first vehicle to a second vehicle that is similar to the first, and then having a transfer of the material to the continuously extended hauling means. This transfer allows for the highly efficient haulage of the mined material despite the limited width of the mine roadway, which essentially corresponds to the width of the tunneling machine.

In contrast thereto, Kinney et al, U.S. Pat. No. 5,252,020, refers to a collection system of non-recyclable and recyclable waste, wherein a central collection vehicle is loaded by a plurality of satellite vehicles having multiple bins for different waste materials. Kinney fails to teach a number of the features of the invention as set forth in Claim 1. Kinney fails to teach haulage of subsurface-mined material. Instead, Kinney is in the non-analogous art of collecting and segregating recyclable and non-recyclable waste, which does not have the same logistical considerations of subsurface mining. As explained in the original specification, Para. [0002]:

"There exist various methods for the haulage in subsurface mining. It is known, in particular, to initially create driving roadways, on which the desired material is obtained laterally of the roadway. In addition to so-called "longwall mining," a method of this type has also become known, for example, as a "room and pillar" method, in which the material is mined from rooms and pillars are respectively left standing in order to support the roofs. Subsurface haulage means, for example, in the form of extendible conveyor belts are usually arranged in the roadway. ... If it is intended to employ a "room and pillar" method, it is therefore common practice to drive a roadway, the width of which essentially corresponds to the width of the tunneling machine, wherein

further mining is then carried out laterally of this roadway. ... However, a passing option for such vehicles is not provided in the region of this roadway such that two vehicles traveling in opposite directions cannot pass or cross one another and the vehicles therefore need to travel the distance between the heading face and the stationary haulage means as fast as possible, namely also in relatively tight curves.”

Thus, it is submitted that the garbage hauling apparatus of Kinney et al fails to teach or suggest the limitations of the invention as claimed, including haulage of subsurface mined material in a mine roadway section between a mine heading face and a continuously extended haulage means, and conducting at least one material transfer from the first of the similar vehicles to a second one of the similar vehicles between the mine heading face, and a transfer of the subsurface mined material to the haulage means. It would not be workable to employ the various garbage trucks of Kinney et al; they are inapposite art in a field fundamentally different from subsurface mining, wherein two vehicles travelling in opposite directions cannot pass or cross one another.

Claim 1 provides that the method uses at least two similar vehicles, each of the similar vehicles comprising a travel drive. Kinney et al fails to disclose such a feature. Kinney's central collection truck 40 (see FIG. 1 and col. 5, lines 17-19) clearly is not "similar" to its satellite collection vehicle 10, and neither of those is similar to Kinney's "conventional compacting garbage truck 102" (see FIGS. 4-5, 8, and col. 6, lines 62-68). Claim 1 provides for moving the at least two similar vehicles in a roadway section between a heading face and a continuously extended haulage means. In contrast, Kinney et al calls for moving the various different vehicles of its apparatus on ordinary surface roads with traffic (see FIGS. 4-5 and 8); Kinney does not have anything to do with mine heading faces or mine roadway sections. Not does Kinney deal with moving similar vehicles between a mine heading face and a continuously extended haulage means. The waste hauled by Kinney et al's apparatus is moved instead to a conventional compacting garbage truck 102 positioned on an ordinary surface street 100 (see FIG. 8 and col.

6, lines 62-68), and not to a continuously extended haulage means positioned in a mine roadway. Claim 1 provides for conducting at least one material transfer from the first of the similar vehicles to a second one of the similar vehicles between the heading face, and a transfer of the material to the haulage means. To the extent Kinney et al provides for transfer of materials, it is between vehicles that clearly are not similar (*compare* satellite vehicle 10, central collection truck 40, and conventional compacting garbage truck 102).

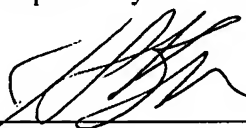
Therefore, Kinney et al fails to teach a number of the specifically claimed method steps and features of the method as set forth in claim 1. Kinney et al does not deal with the problems that arise due to a limited width of mine roadways, occurring only in the field of subsurface mining, nor does Kinney et al have any disclosure of the inventive solution herein set forth in claim 1 in the features of transporting the subsurface mined material from the mine heading face to a continuously extended haulage means, in the meanwhile effecting a material transfer from one of the similar vehicles to another.

For these reasons, it is respectfully requested that the Section 103(a) rejection be reconsidered and withdrawn, due to the failure to state a prima facie case of obviousness. It is thus respectfully submitted that this application is in condition for prompt allowance; and that all of the objections, rejections and requirements raised in the Office action have been met. Early, favorable treatment of this application is requested.

The examiner is encouraged to telephone the undersigned with any questions or comments so that efforts may be made to resolve any remaining issues.

Extension Request and Deposit Account Charge Authorization. The Commissioner is hereby authorized to charge any required fees, or credit any overpayment, associated with this communication, including fees for any necessary extension of time under 37 CFR §1.136(a) for filing this communication, which extension is hereby requested, to our Deposit Account No. 50-0305 of Chapman and Cutler LLP.

Respectfully submitted,

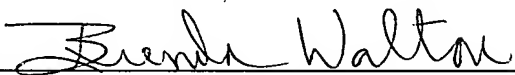

Jane S. Berman, Reg. No. 43,494

Date: June 15, 2010
Attorneys for Applicant(s):
Robert J. Schneider
Jane S. Berman
CHAPMAN AND CUTLER LLP
111 West Monroe Street, Suite 1700
Chicago, Illinois 60603-4080
Telephone: 312-845-3919

CERTIFICATE OF MAILING UNDER 37 CFR § 1.8

Date of Mailing: June 15, 2010

I hereby certify that the attached correspondence, namely: Response to Office Action, with Appendix, return postcard and this certificate of mailing, is being deposited on the date listed above under 37 C.F.R. §1.8 with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Signature: 
Typed Name of Person Signing this Certificate: Brenda Walton

Date of Signature: June 15, 2010